

Work Order ID 73584

Tuesday, September 06, 2011 8:57:42 AM



Page 1

Item ID: D3281-3L02

Accept



Setup Start



Revision ID:

Stop



Item Name: Floor Protector. Aft LH (Black)

Start Date: 9/6/2011 Start Qty: 2.00



Cust Item ID:

Required Date: 9/14/2011 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3281

Rev F

DSI 9504

A

100

0.00



HAND FINISHING THERMOFORMING

Thermoform

Memo

0.00

Thermoforming Machine

Cut Blanks

2.

DL
11/09/08

105

0.00



Dry Material

HandThermo

Memo

0.00

Hand Finishing Thermoforming

Dry Sheet as per QSI022 POLYCARBONATE

Temp: 240°F

Time IN: 4:50 pm 11/09/08

Time OUT: 2:00 am 11/09/08

12

DL
11/09/08

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 73584

Tuesday, September 06, 2011 8:57:42 AM



Item ID: D3281-3L02

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Item Name: Floor Protector, Aft LH (Black)

Start Date: 9/6/2011 Start Qty: 2.00



Cust Item ID:

Required Date: 9/14/2011 Req'd Qty: 2.00



Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

110

0.00



THERMOFORMING MACHINE

Thermoform

Memo

0.00

2

Thermoforming Machine

Thermoform as per Dwg. D3281 and Folio FTA 009

Dwg. Rev. F

Folio Rev. D

DL
11/09/08

120

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

2

Quality Control

DL
11/09/08

130

0.00



HAND FINISHING THERMOFORMING

Thermoform

Memo

0.00

x2

Thermoforming Machine

Trim to Finished Dimensions

DL
11/09/08

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 73584

Tuesday, September 06, 2011 8:57:42 AM



Page 3

Item ID: D3281-3L02

Accept



Setup Start



Revision ID:

Stop



Item Name: Floor Protector, Aft LH (Black)

Start Date: 9/6/2011 Start Qty: 2.00



Cust Item ID:

Required Date: 9/14/2011 Req'd Qty: 2.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

140

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

x2

DL
11/09/08

Quality Control

150

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

8/10/12

(x2)

Quality Control

160

Packaging

0.00



Packaging

Memo

0.00

(x2)

11-09-13

Packaging

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 73584

Tuesday, September 06, 2011 8:57:42 AM



Page 4

Item ID: D3281-3L02

Accept



Setup Start



Revision ID:

Stop



Item Name: Floor Protector, Aft LH (Black)

Start Date: 9/6/2011 Start Qty: 2.00



Cust Item ID:

Required Date: 9/14/2011 Req'd Qty: 2.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
---------	--------	-----------	------------	------------	---------------	-------------

170

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/9/14 DJ

11-09-13
(2)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Tuesday, September 06, 2011 8:57:39 AM

Page 1

Work Order ID: 73584

Parent Item: D3281-3L02

Parent Item Name: Floor Protector, Aft LH (Black)



Start Date: 9/6/2011

Required Date: 9/14/2011

Start Qty: 2.00

Required Qty: 2.00

Comments:

IPP Rev:A 04.07.01 New issue: KJ/JLM

IPP Rev B 07.08.07 Thermoform in house DL

Add Step 105 Dry Material 10/04/21 DL

IPP Rev. C

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MLEXS.093-F6006-02		Purchased	No				sf	685.2916		8.666			



GE PLASTICS LEXAN SHEET

Location

therm

106751

110877

Loc Qty

685.29158

105.89

579.40158

Loc Code

8.666 of 64.

OK
11/09/08

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 73584
Description: Floor Protector, Aft LH		Part Number: D3281-3
Inspection Dwg: D3281	Rev: F	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST
THERMOFORMING SECTION

Description	Accept	Reject	Method of Inspection	Comments
Inside Radii less than 0.1875"	✓			
Shape Definition	✓			
Texture Retention	✓			
Material imperfections such as bumps, cracks, voids, scratching	✓			

Measured by: Dh	Date: 11/09/08
------------------------	-----------------------

TRIMMING SECTION

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
17.8	+/-0.100	17.7"	✓		TAPEDL-01	
17.1	+/-0.100	17.0"	✓		TAPEDL-01	
14.3	+/-0.100	14.21"	✓		TAPEDL-01	
0.95	+/-0.030	0.92"	✓		UrnTH-01	
0.050	Min	0.064"	✓		UrnTH-01	
0.070	Min	0.087"	✓		ULTRA	

Measured by: Dh	Date: 11/09/08
Audited by: B	Date: 11/09/12
Preliminary Approval:	Date:

Rev	Date	Change	Revised by	Approved
A	08.02.28	New Issue	KJ/DL	
B	08.04.16	Dimensions updated per Dwg Rev D	KJ/DL	
C	08.09.12	Tolerance revised for 0.070 dimension	KJ/DL	
D	10.09.01	Dimensions updated per Dwg Rev E	KJ	
E	11.06.21	Dwg Rev updated	KJ	

8 7 6 5 4 3 2 1

D

C

B

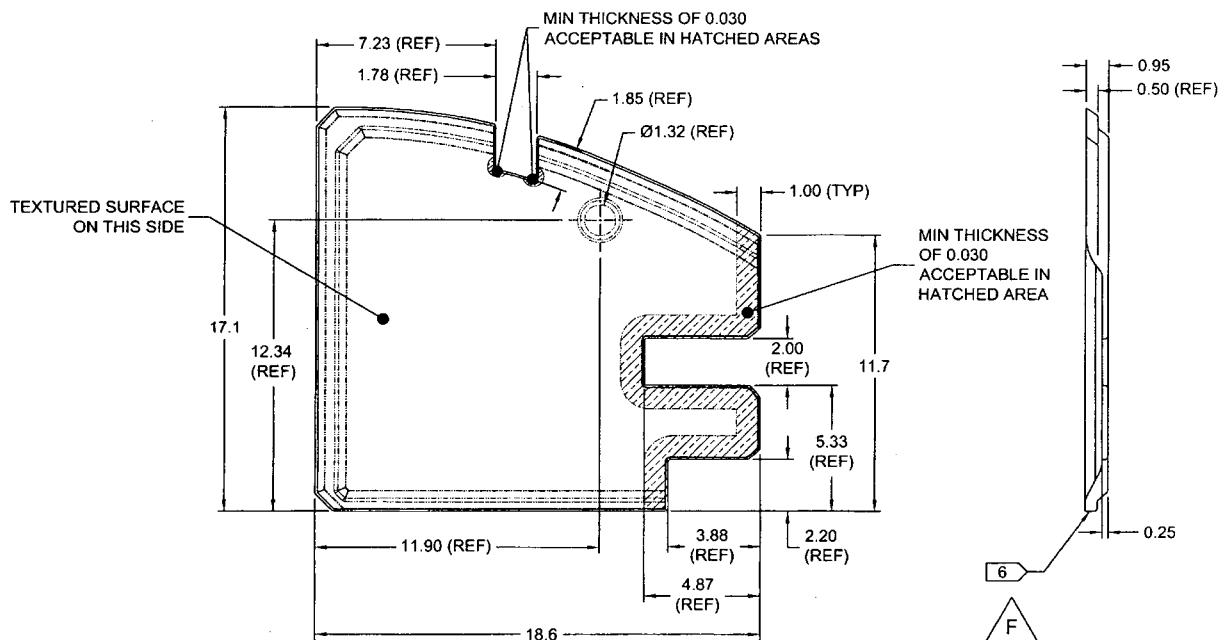
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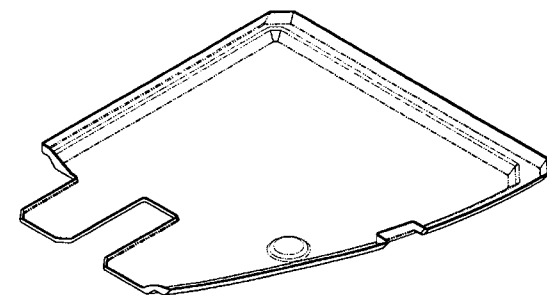
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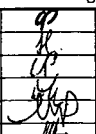
D3281-1 FLOOR PROTECTOR



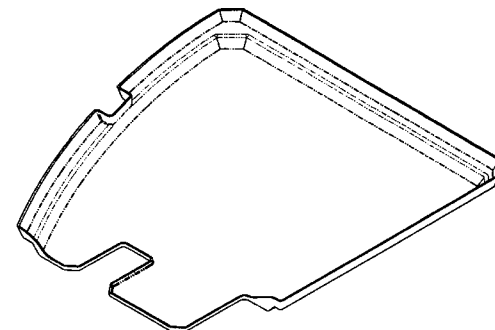
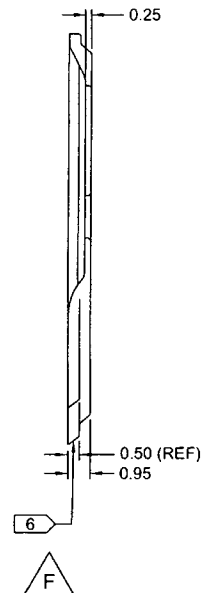
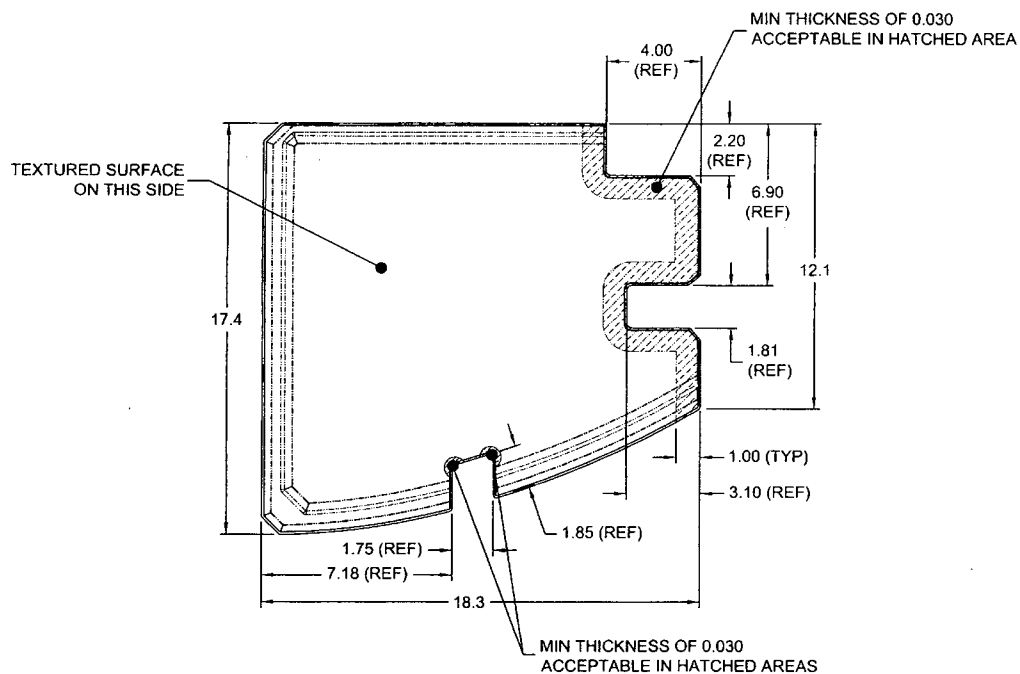
RELEASED
2010-11-25

NOTES:

- 1) MATERIAL: -1L02 = LEXAN F6006, BLACK No. 701, 0.093" THICK (MLEXS.093-F6006-02)
-1L08 = LEXAN 90318 (PROTECT-A-GLAZE), 0.118" THICK, 112-CLEAR (MLEXS.118-90318-08)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.010 MAX
- 6) IDENTIFICATION: IDENT WITH DART P/N "D3281-1Lxx" AND B/N PER QSI 044 6.4 ALONG PERIMETER OF PART AS SHOWN.
- 7) WEIGHT: D3281-1L02 = 0.95 lb D3281-1L08 = 1.13 lb
- 8) THERMOFORM WITH MOLD D3281-1T1 PER DART QSI 022; TRIM AS SHOWN
MINIMUM THICKNESS AFTER FORMING: 0.070" EXCEPT WHERE INDICATED

F	NOTES UPDATED. FLAG NOTE 6 WAS 7 & RELOC. D.E.O. D3281-E-1 INC. DIM 17.0 WAS 17.1 (ZN B5-3, B6-4) & 17.7 WAS 17.8 (ZN C5-3, C6-4) REF CAR 10-21.	JPH	10.09.27
E	-3/4 NOW TRIMMED FLAT: RMV 0.25 BEVEL TO FACILITATE TRIMMING (ZN D6-3, D4-4)	CP	10.01.05
D	THICKNESS 0.093 WAS 0.125, MIN THICKNESS 0.070 WAS 0.080, P/N AND B/N ID WITH VIBRATING STYLUS (ZN A7-1, A7-2, A7-3, A7-4); D3281-4 NOW ON PAGE 4; CORRECT WEIGHTS (ZN A8-1, A8-2, A8-3, A8-4)	PH	08.03.28
C	UPDATE DIMS TO MATCH PARTS: COLOUR 701 WAS 700, GENERAL UPDATE	LE	07.10.09
B	NOW LEXAN; DIMS AS MANUFACTURED	CP	05.11.25
A	NEW ISSUE	CP	04.05.03
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED			
MFG. APPR.		DRAWING NO.	REV. F
APPROVED		D3281	SHEET 1 OF 4
DE APPR.		TITLE	SCALE
DATE		FLOOR PROTECTOR	NTS
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8 7 6 5 4 3 2 1



D3281-2 FLOOR PROTECTOR

NOTES:

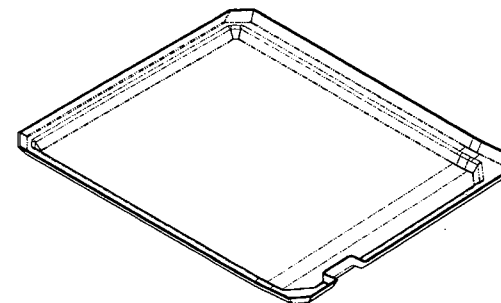
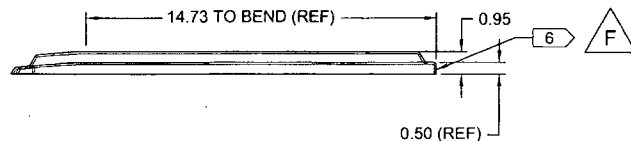
- 1) MATERIAL: 2L02 = LEXAN F6006, BLACK No. 701, 0.093" THICK (MLEXS.093-F6600 02); 2L08 = LEXAN 90318 (PROTECT-A-GLAZE), 0.118 THICK, 112-CLEAR (MLEXS.118-90318-08)
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.010 MAX
 - 6) IDENTIFICATION: IDENT WITH DART P/N "D3281-2Lxx" AND B/N PER QSI 044 6.4 ALONG PERIMETER OF PART AS SHOWN.
 - 7) WEIGHT: D3281-2L02 = 0.95 lb D3281-2L08 = 1.13 lb
 - 8) THERMOFORM WITH MOLD D3281-2T1 PER DART QSI 022; TRIM AS SHOWN
- MINIMUM THICKNESS AFTER FORMING: 0.070" EXCEPT WHERE INDICATED

RELEASED
2010-11-25

DESIGN	JP	DART AEROSPACE LTD	
DRAWN	JP	HAWKESBURY, ONTARIO, CANADA	
CHECKED	JP	DRAWING NO.	REV. F
MFG. APPR.	JP	D3281	SHEET 2 OF 4
APPROVED	JP	TITLE	SCALE
DE APPR.	JP	FLOOR PROTECTOR	NTS
DATE	10.09.27	COPYRIGHT © 2004 BY DART AEROSPACE LTD	
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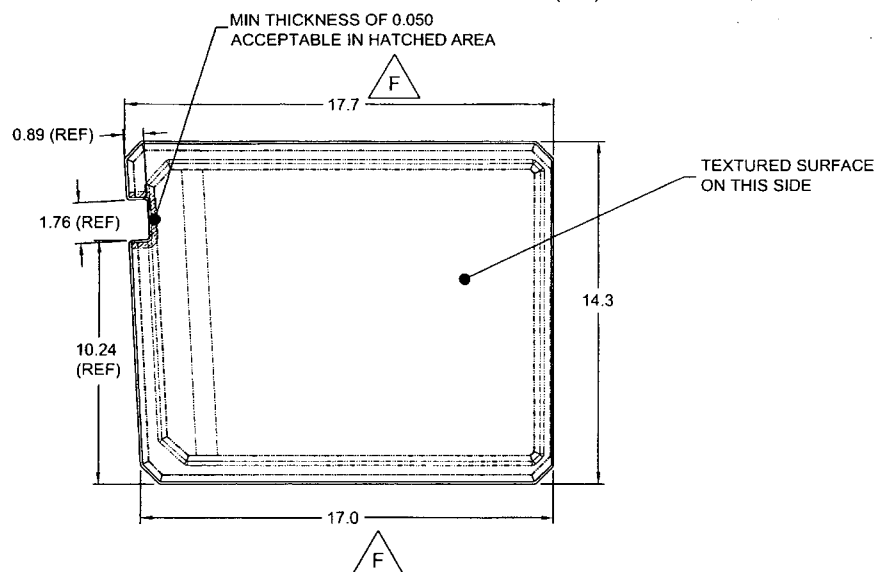
8 7 6 5 4 3 2 1

D



D

C



C

B

D3281-3 FLOOR PROTECTOR

RELEASE
2010-11-25

NOTES:

- 1) MATERIAL: -3L02 = LEXAN F6006, BLACK No. 701, 0.093" THICK (MLEXS.093-F6006-02)
-3L08 = LEXAN 90318 (PROTECT-A-GLAZE), 0.118 THICK, 112-CLEAR (MLEXS.118-90318-08)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.010 MAX
- 6) IDENTIFICATION: IDENT WITH DART P/N "D3281-3Lxx" AND B/N PER QSI 044 6.4 ALONG PERIMETER OF PART AS SHOWN.
- 7) WEIGHT: D3281-3L02 = 0.87 lb D3281-3L08 = 1.05 lb
- 8) THERMOFORM WITH MOLD D3281-3T1 PER DART QSI 022; TRIM AS SHOWN
MINIMUM THICKNESS AFTER FORMING: 0.070" EXCEPT WHERE INDICATED

A

73584

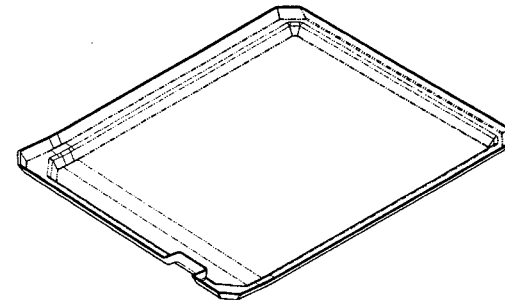
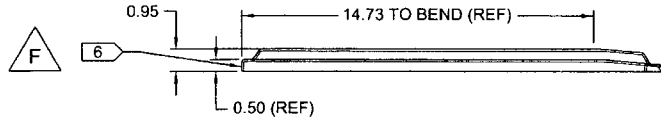
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MFG. APPR.	<i>JD</i>	D3281	SHEET 3 OF 4
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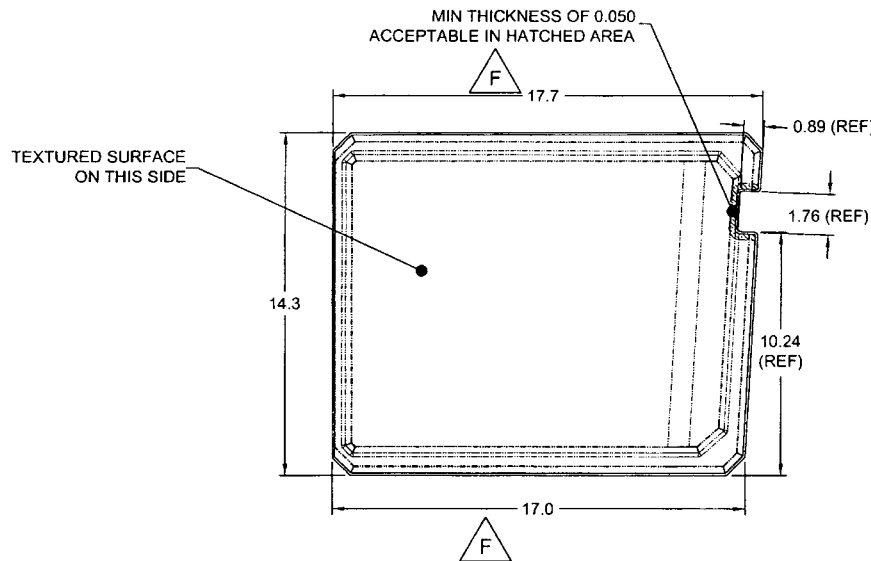
8 7 6 5 4 3 2 1

8 7 6 5 4 3 2 1

D



C



D3281-4 FLOOR PROTECTOR

B



D3281-4 NOTES:

- 1) MATERIAL: -4L02 = LEXAN F6006, BLACK No. 701, 0.093" THICK (MLEXS.093-F6006-02) -
-4L08 = LEXAN 90318 (PROTECT-A-GLAZE), 0.118 THICK, 112-CLEAR (MLEXS.118-90318-08)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.010 MAX
- 6) IDENTIFICATION: IDENTIFICATION: IDENT WITH DART P/N "D3281-4Lxx" AND B/N PER QSI 044 6.4 ALONG PERIMETER OF PART AS SHOWN.
- 7) WEIGHT: D3281-4L02 = 0.87 lb D3281-4L08 = 1.05 lb
- 8) THERMOFORM WITH MOLD D3281-4T1 PER DART QSI 022; TRIM AS SHOWN
MINIMUM THICKNESS AFTER FORMING: 0.070" EXCEPT WHERE INDICATED

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73584

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2010-11-25

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DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D3281	SHEET 4 OF 4
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8 7 6 5 4 3 2 1